DOCUMENT RESUME

ED 326 127 HE 024 027

AUTHOR Twede, Karen
TITLE Baccalaureate Transfers: An Exploration of Factors That Influence Second Institution Choice. ASHE Annual Meeting Paper.
PUB DATE Nov 90
NOTE 36p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (Portland, OR, November 1-4, 1990).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Aspiration; *College Choice; *College Transfer Students; Decision Making; Family Financial Resources; Higher Education; Parochial Schools; Private Colleges; Public Colleges; School Holding Power; Student College Relationship; Student Mobility; *Undergraduate Students
IDENTIFIERS *ASHE Annual Meeting

ABSTRACT

The study attempted to determine the transfer patterns of students in four-year colleges and universities in order to understand the forces influencing transfer behavior and the choice of institutions. A short survey was mailed to 203 students selected from a large sample from which ambiguous results had been obtained in an earlier survey. After responses were received, the sample was further refined, leaving a smaller but reliable sample of students who entered different baccalaureate institutions in 1987 and subsequently transferred to a different higher education institution in the United States. Among the findings were: (1) half the students were satisfied with their initial college, largely because 65% were already attending their first choice; (2) transferring from four-year to two-year colleges was primarily due to finances; (3) students attending college for economic reasons, i.e., to get a better job and earn more, transfer more often to public institutions than to private; and (4) students may transfer due to realigning their goals. Four factors that influenced second institution choice were: effects from attendance at the initial institution; academic performance; college finances; and academic climate. Suggested areas of future research involve studying a variety of measures of academic and social involvement, the role of finances, and comparing the educational experiences of baccalaureate transfers with baccalaureate persisters. Tables detail study findings. Contains 24 references. (GLR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED326127

Baccalaureate Transfers: An exploration of factors that influence second institution choice

A Paper Presented at the Annual Meeting
of the Association for the Study of Higher Education

Portland, Oregon
November 1-4, 1990

HE023027

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

ASHE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Karen Twede
Graduate School of Education
University of California, Los Angeles
Los Angeles, CA 90024-1521
BITNET: IXY7KTW@UCLAMVS

Texas A&M University
Department of Educational
Administration
College Station, TX 77843
(409) 845-0393

ASSOCIATION FOR THE STUDY OF HIGHER EDUCATION

This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Red Lion-Jantzen Beach in Portland, Oregon, November 1-4, 1990. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

This study is designed to examine the transfer patterns of students in four-year colleges and universities. The goal is to better understand the forces influencing transfer behavior and the choice of transfer institution.

This line of inquiry is important because the educational experiences of baccalaureate transfers have been "hidden" in the higher education literature. Research in the attrition literature has either grouped baccalaureate transfers with institutional dropouts (e.g. Bean, 1985; Pascarella & Terenzini,1979,1980; Terenzini & Pascarella, 1977,1978), or merged them with students who persist at their initial institutions (e.g. Munro,1981; Astin,1975; Panos & Astin,1968). Research in the college impact literature has typically excluded baccalaureate transfers from the study sample (e.g. Astin,1977). Rarely have baccalaureate transfers been the focus of higher education research, especially when considering experiences in higher education that occur after leaving the initial institution.

Tinto (1982) notes the inadequacy of attrition models to distinguish between various types of student departure. For example, he notes the inability of his model to distinguish between behaviors that lead to institutional transfer as opposed to permanent withdrawal from higher education. This study is designed to look at the interinstitutional movements of students and the individual and institutional characteristics that influence these movements. Two student attrition models will be used in understanding transfer institution choice, namely Astin's theory of student involvement (1984) and Tinto's model of student departure (1987). Using the framework of Tinto's model, the study will look at what student intentions, educational goals, and measures of institutional commitment contribute to the choice of a second institution. The study will also use measures of Astin's concept of involvement and Tinto's construct of

institutional integration to look at how student experiences at their initial institutions and perceptions of the faculty and students that make up the institutional environment, influence the choice of the institution to which they transfer.

Several student retention studies have included transfers in the analysis. In a study that compared persisters, transfers, voluntary dropouts, and dismissals from three liberal arts colleges, Hackman and Dysinger (1970) found that it was possible to differentiate between the four groups by level of commitment and academic competency. Baccalaureate transfers and "stop-outs" were characterized as having solid academic competence with low commitment. Commitment was defined as a combination of goal commitment and institutional commitment.

In a single institution study that tested Tinto's model, Getzlaf, Sedlacek, Kearney and Blackwell (1984) found that baccalaureate transfers fell between persisters and voluntary dropouts on measures of academic performance, institutional commitment, and academic integration. Goal commitment was not found to be significantly different for transfer students when compared with persisters. They also suggested a relationship between transfer and large differences between expected and actual academic performance. Munro (1981) included baccalaureate transfers with her sample of persisters. She found that goal commitment, that is the goal to complete their education was the best predictor of persistence.

These studies suggest that institutional commitment and goal commitment may be separate constructs, yet key in understanding the baccalaureate transfer process. Transfers may be characterized as having strong goal commitment and low institutional commitment; and the choice of a transfer institution may be a manifestation of these commitments. This

hypothesis was indirectly tested by Mallette and Cabrera (1990), who used the Tinto model to explain student decisions to persist or transfer. In their study, goal commitment and institutional commitment were looked at separately. Interestingly, only these two constructs of the model predicted persistence. Limitations of their study include the small number of transfers in the sample (29 out of 903), the small alpha coefficient of the goal commitment scale (.36), and the lack of controls for student background characteristics that could explain differences in the departure decision.

Methodology

Sample

The present study was conducted using data from the Cooperative Institutional Research Program (CIRP) Freshman Survey and the Follow-up Survey which are administered by the Higher Education Research Institute. The CIRP institutions are a representative sample of U.S. institutions of higher education, thus the sample of institutions in CIRP lends itself well to the study of student interinstitutional migration.

A two-year cohort (1987-1989) was chosen because it has been shown that the majority of institutional departures occur during the first two years of college (Astin, 1975; Bean, 1986). It was also chosen for its policy implications. Specifically, by looking at the first two years of college we are able to discern possible interaction patterns between students and institutions that reflect varying degrees of integration. These patterns will suggest whether institutional transfer is a result of student growth or that of alienation thus suggesting an appropriate institutional role, that of support or active intervention.

This exploratory study about baccalaureate transfer is based on a sample of 592 students who entered 206 different baccalaureate institutions in 1987 and subsequently transferred to a different higher education institution to

continue their academic studies. This sample was chosen from 781 students who indicated that they had attended more than one college by entering the name of a different institution from their initial institution in the space provided on the questionnaire. After studying the enrollment patterns reported by the students and registrars data from the initial institution, it became evident that this method of choosing a sample of baccalaureate transfers was ambiguous, that is it included students who were on study abroad programs, students who had not yet transferred, as well as students who planned to return to their initial institutions. Therefore a second follow-up survey was used to clarify student response patterns. A short survey was mailed to 203 students, about one-fourth of the original sample. Based on the results of this second follow-up survey, subjects were removed from the sample if 1) the second institution was outside the United States, 2) the student reported that they did not leave their initial institution, 3) registrars data from the initial institution indicated that the student was registered for the Fall of 1989, or 4) the student returned the second follow-up survey indicating that he/she had returned to their initial institution. Through this process a smaller, more reliable sample was chosen.

Analysis

The analysis will consist of two parts. The first part will consist of a crosstabulation between different initial and transfer institution types, defined by control (public vs. private); religious affiliation (nonsectarian, Catholic, or Protestant); type (four-year or university); and selectivity (high, medium and low).[1] This crosstabulation will be used to discern dominant migration patterns which will be used as dependent variables in the second stage of analysis.

---

[1] Selectivity is defined by the average math plus verbal SAT scores of the entering first-year class. See Astin et al (1987) for the range of scores for each level of selectivity used for the present study.

The second part of the analysis will consist of multiple regression analyses used to predict the student migration patterns found between the initial institution and the transfer institution. Each type of transfer will be regressed on the independent variables that are hypothesized by theory or practical circumstances to influence second institution choice (Table 1). Characteristics of the initial institutions will be controlled for in each analysis.

Although dichotomous dependent variables suggest the use of logistic regression for analysis, it has been found that in practice there are no significant differences in the results when logistic regression; discriminant analysis or linear probability functions are compared (Cleary & Angel,1984). Similar findings by Goodman (1975) suggest that as long as the sample distribution is between .25 and .75 on the dependent variable, multiple linear regression is an appropriate tool for analyzing dichotomous dependent variables. Therefore a blocked, stepwise procedure will be used for these analyses.

Results and Discussion

Sample characteristics

Table 2 lists the frequencies of the background characteristics and some of the pre-matriculation attitudes for the sample of baccalaureate transfers. The table illustrates that the sample represents students from a variety of backgrounds with diverse attitudes and aspiration. There are more women than men in the sample which is consistent with other research that women transfer more often then men (Astin,1975). The racial make-up of the sample represents the larger sample from which it was drawn by being predominantly white. The socioeconomic measures, namely Mother's level of education and Father's career prestige score[2] indicate a broad range of student backgrounds.

---

2 Father's occupation was recoded into a continuous variable of prestige using Bose (1985) rankings.

The religious affiliation of the students tend to be Catholic and Protestant, which may influence the student's choice of initial college as well as their choice of a second institution. Finally, high school grades seem representative of the larger CIRP sample from which the baccalaureate transfer sample was drawn. Table 3 compares high school grades between the present sample of baccalaureate transfers and all students who attended four-year colleges and universities reported in the 1987 freshman norms book and shows that transfers have a reasonable distribution of high school grades (Astin, 1987).

Table 3
Percent of students earning each category of high school grades by CIRP institutional categories and baccalaureate transfers

Sample categories	High School Grades A+/ A	A- /B+	B	B- /C+ C
Baccalaureate transfers	11	38	25	23 3
CIRP 1987 universities	20	42	20	15 3
CIRP 1987 four-year colleges	10	21	23	27 8

Almost half of the students indicated that there was a "very good" chance that they would be satisfied with their initial college. This is not surprising since about 65% of the students indicated that they were attending their first choice institution. Table 4 illustrates the positive relationship between predicted satisfaction with the initial institution and attending a student's first choice institution. This relationship suggests that students who attend their first choice institution may show a "readiness" to become integrated in the institution, whereas students not attending their first choice institution may be hesitant or resistant to institutional integration.

Table 5 illustrates the different intentions of transferring by initial college choice. This pattern suggests that something happens during the college years which dissuades students from persisting at their first choice college. It also suggests that students who enter their less than first choice college may be less receptive to their initial institution.

Although 54% predicted that there was "some" or a "very good" chance that they would transfer, 81% of the students aspired to a bachelor's degree at their initial college. Since a great majority of students started college at a private institution, this discrepancy may reflect a student's tentativeness about his/her ability to make the grade or finance their degree program.

Among the students in the present sample there seems to be some concern about being able to finance their educations. Sources for financing the first year of their education are predominantly through family and self support. Eighty-seven percent of the students received some financial support from their parents or spouses. Fifty-six percent of the students received over $3,000 from their parents. The next most common source of financing was the students themselves through savings, summer work and part-time or full-time work during college. Seventy-eight percent of the sample contributed to their own education. Grants and loans were reported as resources by 48% and 42% of the students respectively. Family and student contributions are similar to the national sample of students entering college in 1987, with, however, the proportion of financing from grants and loans being higher for the present sample (Astin, 1987).

Tables 6 and 7 show the results of the two factor analyses conducted on the reasons for going to college and the reasons students gave for choosing their initial institution. The four underlying reasons for attending college are

labeled Academic Reasons, Economic Reasons, Self-improvement, and External Motivation.

The reasons for choosing an initial college can be represented by the factors labeled Future Benefits, Other's Advice, College Reputation, and for Financial Reasons. Only eight of the fifteen items measuring reasons for choosing their initial institution loaded on the four factors, two items on each factor. Two item latent variables need to be used with caution because they may not be very reliable. However, the factors are marked by high loadings and make sense. Therefore, the two sets of factors were developed into scales and used in the multivariate analyses.

Initial institution characteristics

Table 8 describes the variety of institutions which represent the initial institutions attended by the students sampled. A majority of students (62%) attended institutions over 100 miles from home. This would indicate that this sample did "go away to college." In fact 273 of the students (46%) attended an initial college outside of their home-state. Most of the students attended private four-year colleges and over 50% of the institutions were located in the mid-Atlantic and southeast regions of the country. The median enrollment was about 2,700 students with moderately high selectivity levels. In-state tuition ranged from 0 (19% of the institutions) to $10,476. Only 41 institutions charged out-of-state tuition which matches the smaller sample of public institutions.

Due to the large number of private liberal arts colleges in the sample, it is not surprising that so many of the initial institutions do not graduate very many students, if any, in engineering or the health professions. This observation is based on the deliberate exclusion of professional programs at traditional liberal arts colleges as well as the costs associated with these two programs which limits their feasibility at small schools. Since changes in major, especially to a

professional degree, may contribute to choosing a transfer institution, degrees granted in these areas will be used to control for this institutional "push" in the multivariate analyses.

Student Migration

Where and why students transfer are central questions to the present study. If baccalaureate transfer is not random, then patterns should emerge from the data which will suggest answers to these questions. Table 9 shows the results from a crosstabulation between initial institutions and transfer institutions and is used to detect migration patterns between institutional types (Chi square=390.98, d.f.=198, $p<.01$). The two most obvious patterns are the consistent student movement to two-year colleges, except from private institutions with high selectivity, and the one-way movement of students to public universities and four-year colleges. Although the sample represents attendance at primarily private institutions (72%), students from public institutions also transfer primarily to public institutions.

It is interesting to note that only the public universities and colleges, and two-year colleges showed a "net gain" in enrollment through student transfer. Assuming that this sample of baccalaureate transfers is representative of the transfer population, all three types of private colleges exhibit a drain on their enrollments through transfer. Although small "liberal arts" colleges have more of the characteristics that are related to retention, such as opportunities for contact with faculty, residential campuses and opportunities for involvement with extracurricular activities, at least for this sample, these institutions are more likely to lose students to transfer than other types of institutions.

Another place to look for transfer patterns is to look at the differences between the student's home-state, the state of the initial institution and the state of the transfer institution. Since 273 (46%) students started college outside of

their home-state, it was interesting to note that 177 (65%) transferred back to their home-state controlling for any changes in parent's residence. Of those students who started their education "in-state," only 43 or 7% transferred to an institution out-of-state. This pattern suggests a draw for students to be close to home. Whether that draw stems from the student's family, high school friends, or the security that familiarity brings cannot be explored by the present study, however these transfer patterns will be used to explore the choice of transfer institution.

Prediction of Institutional Transfer

The previous section explored where students transfer from various types of institutions. This section attempts to look at the "Why" behind those institutional transfer patterns. Multiple regression analysis was used to explore the patterns of independent variables in a time ordered sequence. The blocking of the independent variables consists of background variables, pre-matriculation variables, initial institution characteristics, post-matriculation variables and perceptions of the initial institution. The partial correlations of the reasons given for transferring with the dependent variables were looked at after the final block of independent variables in order to determine their independent contributions to the regression equation and to test their congruence with the other significant independent variables. Dependent variables were created from the migration patterns discussed previously, namely reverse transfer to two-year colleges and transfer from private to public institutions.

Reverse transfer

Table 10 shows the results of the regression analysis predicting transfer from a university or four-year college to a two-year institution. Thirty-two percent of the variance is explained by the 21 step regression equation. Students who transfer to two-year institutions from baccalaureate colleges and universities

come from families with lower socioeconomic status, reported affiliations with a religion other than Protestant, Catholic or Judaism, and reported lower high school grades than students who transfer to a different baccalaureate institution.

Reverse transfers are more likely to indicate concern about financing their educations and they were significantly less likely to report receiving financial support from grants. Concern about educational costs as a primary reason for transferring to a two-year institution is consist with research about students who attend two-year colleges (Mitchell and Grafton,1985; Hogan,1986).

As noted previously, reverse transfer originates from a variety of initial institutions. Eight different institutional characteristics entered the regression equation. Students who transfer from nonsectarian colleges are more likely to choose a two-year college, whereas students who depart from Catholic colleges are more likely to transfer to another baccalaureate institution. All four of the professional degree programs positively entered the equation suggesting that students who transferred to other baccalaureate institutions transferred from colleges that did not have professional degree programs. Reverse transfer was also more likely to occur in the far west region of the country.

The institutional characteristics are interconnected with each other in such a way that as each variable enters the equation, the other institutional variables become more defined. Observing the *beta* changes for these variables illustrates the further definition of institutional characteristics predicting reverse transfer. Students who transfer to two-year colleges from institutions that have higher rates of engineering degrees usually do not have schools of education (step 10). Once Catholic institutions are controlled for, reverse transfers are observed more often in the Far West (step 9). Similarly, institutions which offer undergraduate degrees in the health sciences switch from having a

negative relationship with reverse transfer to a significant positive relationship after the negative variance of Catholic institutions is controlled. Considering the large nursing programs that are housed at many Catholic colleges, this suppression effect is not surprising. Reverse transfers are also found more often from nonsectarian institutions that offer undergraduate degrees in education as such, reverse transfers may occur more often from "comprehensive" nonsectarian colleges rather than traditional "liberal arts' colleges (step 11). The relationship between out-of-state tuition and nonsectarian colleges is confusing (step 14). However, since out-of-state tuition only applies to public institutions, significant entry in the equation could be an indication of student migration between public colleges and universities to two-year colleges.

Reverse transfer is also characterized by lower college grades and lower degree aspirations after controlling for high school grades and degree aspirations in 1987. This pattern could be an example of students realigning their goals based on the performance feedback received during college. They also expressed satisfaction with the campus social life, but felt that the faculty there were not committed to the welfare of the institution.

Students who continued their education at a baccalaureate institution were characterized as receiving higher grades, as holding higher degree aspirations after two years of college, changing their majors to business and transferring outside their home-state.

Significant partial correlations for the items measuring reasons for transferring are: Tired of being a student (.22), Bored with course work (.18), Wasn't doing well academically (.17) and Family responsibilities (.11). The self-reported statements seem to mirror the activities and sentiments described by the regression analysis. Motivation to achieve seems to have wavered for

students who transfer to two-year colleges. It is interesting that the self-report item "couldn't afford college" did not enter the equation. The zero order correlation for this variable and transferring to a two-year college is .08. This correlation is in the hypothesized direction, but certainly not reflective of the expected magnitude.

Transfer from a private institution to a public institution

This analysis included only students who initially attended private institutions, thus the regression analysis was conducted with 359 subjects (Table 11). Thirty-two percent of the variance is accounted for by the eleven step regression equation. The independent variables which entered the equation suggest that academic programs and performance are the major predictors of transfer to public institutions as opposed to continuing in the private sector.

Specifically, students who transfer from private higher education to public education tend to be men from homes with higher levels of parental education. They attended their first choice institution which they chose on the basis of the financial aid package offered. Many private institutions recruit students by offering generous financial support for the first year that is subsequently lowered for continuing students. Typically the rationale for this procedure is that first year students need to concentrate on their academic programs and become acquainted with college life, whereas continuing students are more able to balance a job and school. However, the results of the present study suggests that this policy may "push" students out of their initial institutions. Students who attend college for economic reasons, that is to get a better job and make more money also tend to transfer more often to public institutions than to other private institutions.

The only initial institutional characteristic which entered the equation was the mid-Atlantic region. This variable entered negatively indicating that students from institutions in that region tend to transfer to other private institutions.

The final four variables are post-matriculation variables, variables which measure behaviors and attitudes after matriculation at the initial college. Students who transfer to public institutions are more certain about their career plans but do not know what to major in after two years and receive lower college grades. Students who change their majors to the health professions and education also tend to transfer to public institutions. Unfortunately the analysis is unable to determine if transfer was due to major change or if major change occurred because of attending a different college. However, changes in major to the two professional programs entered after the percent of degrees conferred in these majors were controlled, which suggests that major changes to a professional program occurred as often from institutions who have degree programs as those that do not.

By looking at the *beta* changes at each step, possible interactions can be detected. When college grades entered the equation the magnitude of the *beta* measuring "female student' decreased by five points, illustrating that men are more likely to transfer to public institutions even when women's higher college grades are controlled. College grades are also mediated by institutions in the mid-Atlantic region (step 6). This implies that students with lower grades attending institutions in this region are also likely to transfer to a different private institution. Finally, student indecision about their major is mediated or suppressed by indecision about their career (step 8). Once career indecision is controlled for, indecision about a major becomes a significant predictor of transfer to a public institution.

The general pattern of the regression equation suggests that students who transfer from private to public institutions are still "floundering" about their educational goals and may be unable to reconcile the higher tuition costs of private education. The significant partial correlations of the reasons for transferring support this generalization. The reasons for transferring which would have entered the equation during the last block are: Could not afford college (.22), and Wanted to attend a college with a better academic reputation (-.16). When the first of these two items entered the regression equation "Changed career plans" (partial correlation= .13) became significant.

Summary and conclusions

The present study has identified several factors that seem to influence second institution choice. The first factor is initial institution choice. Student migration from one type of institution to another is not random. Students from public institutions tend to transfer more often to other public baccalaureate institutions and two-year colleges. Students from private universities are more likely to transfer to public universities, whereas, students from Catholic institutions tend to transfer to public baccalaureate institutions or to another Catholic college. Students from nonsectarian colleges transferred to the broadest range of college types, as did students from Protestant colleges, however there was a noticeable absence of Protestant colleges in that range of transfer institutions. Reverse transfers originated from a variety of initial institution types, however several types of institutions are conspicuously absent: specifically highly selective institutions, private universities and Catholic colleges. It may be that students who transfer from these types of institutions have different needs or expectations of a transfer institution that two-year colleges can not meet, such as greater institutional prestige.

A second factor influencing second institution choice is academic performance. Those who receive high grades in college transfer to other baccalaureate institutions or continue in the private sector. Students who received lower grades tend to transfer to two-year colleges or if they initially attended private institutions, transfer to public universities or colleges.

A third factor which came up for both student migration patterns was college finances. Students who transferred to a two-year college were more concerned about finances and received less support from grants. Students who transferred from private to public institutions were more likely to chose the institution based on the financial aid package offered by the institution and indicated that they left their initial institution because they could not afford the costs.

A fourth factor seems to be a pattern of academic "floundering" which characterizes the two transfer patterns high-lighted by this study. Reverse transfers reported lower academic performance, yet were more satisfied with the campus social life than their counterparts who transferred to other baccalaureate institutions. Additionally, they did not characterize their initial institutions as having a sense of community between the students and the faculty. If we assume that the "faculty" plays a substantial role in defining the academic climate of an institution, this characterization could be interpreted as a lack of academic integration for these students.

Students who transfer from private institutions to public universities and colleges suggest a different type of "floundering." Here the foundering centered around academic performance and major indecision. It would be interesting to explore if poor academics led to program indecision or, if lack of commitment to an area of study led to poorer grades. Unfortunately the present study is unable to address these questions.

These four factors support and expand Tinto's model of student departure and Astin's theory of student involvement. Student intentions was unable to explain the patterns of student migration measured by the present study. However, institutional commitment and goal commitment may mediate transfer patterns. Institutional commitment as measured by attending a first choice college predicted transferring from a private institution to a public institution. By turning the dependent variable around to, transfer to another private institution, suggests that students who did not attend their first choice private institution transferred to another institution, perhaps their initial first choice institution. Lower goal commitment as measured by degree aspirations was associate with transferring to a two-year college.

Academic and social integration and involvement are important factors for predicting student migration. Academic performance which is an outcome of academic involvement and/or academic integration "pushes" students to public and two-year colleges. A lack of academic integration as measured by student perceptions of the faculty at their initial institutions may also "push" students to two-year colleges as opposed to another baccalaureate institution. Indecision about what to major in after two years of college or major change may indicate positive or negative involvement in academics. Through involvement in an academic program a student may find their initial major does not suit them. On the other hand, a student who is still undecided about his/her career or major after two years of college may suggest a lack of "specific" goal commitment as opposed to the more general goal commitment of earning a degree.

Social integration as measured by satisfaction with the campus social life positively predicted reverse transfer. This might suggest an imbalance between social and academic involvement where too much social involvement detracts

from academic performance and subsequently "pushes" students out of baccalaureate education.

The present study suggests several areas for future research. First, it would be helpful to look at a variety of measures of academic and social involvement to see what activities predict various types of student migration. Through this sort of investigation we might be able to discern what types of involvement lead to institutional integration and subsequent transfer for student growth, as opposed to student transfer due to institutional alienation.

The role of finances in student departure, especially baccalaureate transfer needs to be readdressed by departure models. In the past, departure for financial reasons has been seen as a "socially" acceptable reason, a reason that has been interpreted as a lack of student commitment (Cope and Hannah, 1975; Bean,1986). Considering the change in the composition of federal financial aid packages from grants to loans and the increased incidence of private institutions offering financial assistance in order to support enrollments over the past ten years, it just might be the case that finances have become a "real" reason behind student decisions about departure.

Finally, the present study suggests a need for research which compares the educational experiences of baccalaureate transfers with baccalaureate persisters. A long what dimensions are the experiences of these two approaches to higher education similar or different, and if they do differ, how are students affected? From an institutional point of view, baccalaureate transfer is a negative action because it means a loss of a student. However, we do not know very much about how it affects the development of the student.

REFERENCES

Astin, A.W. (1975). Preventing students from dropping out. San Francisco: Jossey - Bass.

Astin, A.W. (1977). Four critical years. San Francisco:Jossey-Bass.

Astin, A.W. (1984). Student involvement: A developmental theory for higher education. Journal of College Student Personnel, 25, 297-308.

Astin, A.W., Green, K.C., Korn, W.S. & Schalit, M. (1987). The American freshman: National norms for fall 1987. Los Angeles: The Higher Education Research Institute.

Bean, J.P. (1985). Interaction effects based on class level in an explanatory model of college student dropout syndrome. American Educational Research Journal, 22, 35-64.

Bean, J.P. (1986). Assessing and reducing attrition. In D. Hossler, (Ed.) Managing College Enrollments, New Directions for Higher Education, No. 53, San Francisco:Jossey- Bass.

Bose, Christine E. (1985) Jobs and gender: A study of occupational prestige. New York: Praeger.

Cleary, P.D. & Angel, R. (1984). The analysis of relationships involving dichotomous dependent variables. Journal of Health and Social Behavior, 25, 334-348.

Cope, R., & Hannah, W. (1975). Revolving college doors: The causes and consequences of dropping out, stopping out, and transferring New York: John Wiley and Sons.

Folger, J.K., Astin, H.S. & Bayer, A.E. (1970). Human resources and higher education. New York: Russell Sage Foundation.

Getzlaf, S.B., Sedlacek, G.M., Kearney, K.A., & Blackwell, J.M. (1984). Two types of voluntary undergraduate attrition: Application of Tinto's model. Research in Higher Education, 20, 257-269.

Goodman, L.A. (1976) The relationship between modified and unusual multiple - regression approaches to the analysis of dichotomous variables Sociological Methodology 1976, D.R. Heise (ed.) San Francisco:Jossey-Bass, 83-110.

Hackman, R. & Dysinger, W.S. (1970). Research notes: Commitment to college as a factor in student attrition. Sociology of Education, 43, 311-324.

Hogan, R.R. (1986). An update on reverse transfers to two-year colleges. Community/Junior College Quarterly, 10, 295-306.

Mallette, B.I. & Cabrera, A.F. (1990, April) Determinants of withdrawal behavior: An exploratory study. Paper presented at the meeting of the American Educational Research Association, Boston, MA.

Mitchell, G.N. & Grafton, C. L. (1985). Comparative study of reverse transfer, lateral transfer, and first-time community college students. Community /Junior College Quarterly, 18, 133-141.

Munro, B.H. (1981). Dropouts from higher education: Path analysis of a national sample. American Educational Research Journal, 18, 133-141.

Panos, R.J. & Astin, A.W. (1968). Attrition among college students. American Educational Research Journal, 5, 57-72.

Pascarella, E.T. & Terenzini, P.T. (1979). Interaction effects in Spady's and Tinto's conceptual models of college dropout. Sociology of Education, 45, 258-270.

Pascarella, E.T. & Terenzini, P.T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. Journal of Higher Education, 51, 61-75.

Terenzini, P.T. & Pascarella, E.T. (1977). Voluntary freshman attrition and patterns of social and academic integration in a university: A test of a conceptual model. Research in Higher Education, 6, 25-43.

Terenzini, P.T. & Pascarella, E.T. (1978). The relation of students' precollege characteristics and freshman year experience to voluntary attrition. Research in Higher Education, 9, 347-366.

Tinto, V (1982). Limits of theory and practice in student attrition. Journal of Higher Education, 53, 686-700.

Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: The University of Chicago Press.

Table 1
Independent Variables

Background variables
- Sex (female)
- Race (white)
- High school grade point average
- Mother's level of education
- Father's occupational prestige score

Mother's religious affiliation:
- Catholic
- Jewish
- Protestant
- Other religion
- None

Prematriculation variables

Goal commitments:
- Expect to earn a B.A.
- Highest degree plans-1987

Intentions:
- Expect to transfer

Finances:
- Concern about financing education

Institutional commitments:
- First choice college
- Highest degree planned at initial institution
- Expect to be satisfied with initial institution

Financial sources:
- Family
- Self
- Grants
- Loans
- Other

Reasons for attending college:
- Better job
- General education
- Improve study skills
- Nothing better to do
- Become more cultured
- Make more money
- Learn more about things of interest
- Prepare for graduate school
- Parent's wishes
- Could not find a job
- To get away from home

Reasons for initial college choice:
- Relatives' wishes
- Teacher's advice
- Good social reputation
- Good academic reputation
- Offered financial assistance
- Special program
- Low tuition
- Counselor's advice
- Live near home
- Friend's advice
- Recruited by college rep.
- Recruited by athletic dept.
- Graduate school preparation
- Graduates get good jobs
- Not offered aid at first choice institution

Table 1 cont.

Initial institution characteristics

- Control (private)
- Nonsectarian
- Catholic
- Protestant
- Enrollment
- University/Four year
- Selectivity
- In-state tuition
- Out-of-state tuition
- Percent of graduates in business, education, engineering, health professions
- Region of the country: New England, Mid-Atlantic, Southeast, Plains, Great Lakes, Rocky Mountains, Southwest, and Far West.

Post-matriculation variables

- Involvement measures: First-year residency, Work on-campus, Work while attending school
- College grade point average
- Integration measures:
  - Perceptions of initial institution:

Faculty:

- See outside office hours
- No contact
- Interest in student personal problems
- Interest in student academic problems
- Committed to welfare of institution
- Socialize with students

Students:

- Conformity
- Treated like a number
- Little contact outside of class
- Little socializing with other students
- Many feel that they do not "fit in"

Satisfaction with:

- Academic advising
- Campus social life
- Opportunity to talk to professors
- Contact with faculty and administration
- Overall college experience

Academic programs:

- Change major
- Career undecided
- Major undecided
- Changed major to business, education, enginerring and health professions.

Change in self ratings 1987-1989: popularity, academic ability, self-confidence (intellectual)

Reasons given for transferring:

- Reconsider goals and interests
- Wanted practical experience
- Was bored with course work
- Wanted better academic reputation
- Wanted better social life
- Wanted wider course selection
- Wasn't doing well academically
- Changed career plans
- Didn't "fit in"
- Had a good job offer
- Couldn't afford college
- Tired of being a student
- Family responsibilities
- Wanted to be closer to home

Table 2
Percent of Students on Various Demographic Categories.

Gender		Race	
Female	58	White	89
Male	42	Non-white	11
High school grade point		Father's occupational prestige	
A+ / A	11	20-39	25
A- / B+	38	40-59	21
B	25	60-69	23
B- / C+	23	70-79	22
C	3	80-100	9
Mother's education		Mother's religious affiliation	
Less than diploma	6	Catholic	36
High school diploma	27	Jewish	5
Some college	29	Protestant	42
College degree	22	Other religions	8
Graduate study	16	No religion	4
1987 degree aspirations		Degree aspirations at initial instit.	
Less than B.A.	1	Less than B.A.	7
B.A.	22	B.A.	81
M.A.	47	M.A.	8
Graduate	30	Graduate	2
Other	0	Other	2
Chance of earning a BA college		Chance of satisfaction with	
None	1	None	1
Little	1	Little	5
Some	16	Some	44
Very good	81	Very good	50
Chance of transferring		Number of applications made	
None	15	None	18
Little	31	One-two	32
Some	36	Three-four	31
Very Good	18	Five or more	19
Concern about finances			
None	35		
Some	48		
Major	17		

Table 4

Percent of Students Who Predicted Their Chances of Institutional Satisfaction by Rank of Initial Institution

Chance of being satisfied less	Rank of institutional choice First	Second	Third	Fourth or
No chance	0	1	6	4
Little chance	4	9	6	9
Some chance	41	50	57	31
Very good chance	56	40	31	22
N	376	142	51	23

Note. Chi-Square=65.94150 with 44 df. $p<.05$

Table 5
Percent of Students Who Predicted Their Institutional Transfer by Rank of Initial Institution

Chance of transferring less	Rank of institutional choice First	Second	Third	Fourth or
No chance	19	8	4	9
Little chance	35	28	26	9
Some chance	35	41	37	30
Very good chance	11	23	33	52
N	376	142	51	23

Note. Chi-Square=64.21612 with 40 df. p<.01

Table 6
Factor Loadings on Reasons for Going to College

Item	Loading
Factor 1: Academic.	
Learn more about things of interest	.68037
Preparation for graduate school	.51753
Become more cultured	.49052
Factor 2: Economic.	
Get a better job	.79097
Make more money	.64523
Factor 3: Self-improvement.	
Improve study skills	.76685
Get a general education	.48765
Factor 4: External motives.	
Parent's wanted student to go	.46932
Nothing better to do	.43658
To get away from home	.39978

Table 7
Factor Loadings on Institutional Choice Items

Item	Loading
Factor 1: Future benefits.	
Graduates attend good graduate schools	.54911
Graduates get good jobs	.96796
Factor 2: Other's advice.	
Teacher's advice	.99796
Counselor's advice	.45621
Factor 3: College reputation	
Academic reputation	.89000
Social reputation	.36315
Factor 3: Financial reasons	
Offered financial aid	.42658
Not offered aid at first choice college	.50229

Table 8: Frequencies of Initial Institution Characteristics.

Choice of institution		Distance from home	
First	64	10 miles or less	6
Second	24	11-50 miles	17
Third	9	51-100 miles	15
Less than third	4	101-500 miles	44
		Over 500 miles	18
Institutional control and type			
Private	73	Public	27
Nonsectarian	29	Four-year	16
Catholic	15	University	11
Protestant	20		
University	9		
Institutional sex and race		Region	
Women's	4	New England	11
Men's	1	Mid-Atlantic	27
Predominantly black	4	Great Lakes	13
		Plains	9
		Southeast	27
		Southwest & west	14
Enrollment		Selectivity	
Minimum	143	Minimum	615
Maximum	50,378	Maximum	1303
Median	2,721	Median	963

Percent professional degrees

Professions	Business	Education	Engineering	Health
None	11	17	72	44
1-25%	35	82	26	51
26-50%	50	1	2	4
51-75%	3	0	0	0
Over 75%	1	0	0	1

Table 9

Number of students from each type of initial institution and selectivity level by the type of transfer institution

Initial Institution	Transfer Institution: Public Univer.	Private Univer.	Public 4-year	Non-sectarian	Catholic	Pro-testant	Black College	Two-Year College
Public university								
Low selectivity	10	4	8	1	0	0	0	8
Medium selectivity	4	1	8	1	1	3	0	6
High selectivity	3	0	3	1	1	1	0	1
Private university								
Low selectivity	15	2	8	1	2	1	0	3
Medium selectivity	4	3	3	2	0	0	0	2
High selectivity	4	1	1	1	0	1	1	0
Public 4-year								
Low selectivity	12	0	8	0	0	1	0	12
Medium selectivity	9	1	6	4	3	1	1	12
High Selectivity	7	1	4	0	0	1	0	2
Nonsectarian								
Low selectivity	9	4	16	6	1	5	0	15
Medium selectivity	5	1	4	3	0	0	0	10
High selectivity	16	5	12	20	3	2	0	6
Very high sel.	5	4	4	3	1	1	0	0
Catholic								
Low selectivity	9	5	12	1	7	0	0	2
Medium selectivity	15	4	7	0	2	2	0	4
High selectivity	5	1	5	3	2	0	0	0
Protestant								
Very low sel.	3	0	2	1	0	1	0	3
Low selectivity	9	1	23	3	1	1	1	16
Medium selectivity	7	2	6	4	3	1	0	3
High selectivity	12	3	3	1	0	2	0	5
Black colleges								
Public	0	1	4	1	0	0	3	1
Private	4	1	1	0	0	0	5	3
N	167	45	148	57	27	24	11	114

Table 10

Predictors of student transfer from a baccalaureate institution to a two year college (N=592)

Name	Step	MultR	SimpR	Beta at Step 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Background characteristics																								
Other religion	1	.2413	.24	24	24	24	23	24	22	21	21	20	20	18	18	18	17	17	19	20	19	19	18	18
High school GPA	2	.3119	-.20	-20	-20	-21	-22	-21	-22	-20	-15	-15	-16	-15	-15	-15	-15	-15	-08	-08	-09	-10	-10	-08
Father's career	3	.3324	-.08	-09	-12	-12	-11	-10	-08	-10	-12	-12	-12	-10	-09	-10	-10	-09	-10	-08	-08	-08	-08	-09
Jewish	4	.3430	-.08	-06	-09	-09	-09	-08	-07	-07	-07	-08	-08	-06	-08	-08	-09	-08	-07	-07	-08	-06	-06	-07
Prematriculation variables																								
Academic reason	5	.3522	-.11	-13	-10	-09	-08	-08	-10	-10	-08	-08	-07	-09	-06	-06	-05	-05	-04	-03	-03	-03	-02	-02
Financial concern	6	.3626	.10	06	10	08	07	09	09	12	12	12	13	13	14	13	13	12	12	12	11	11	11	10
Grant aid	7	.3728	-.12	-10	-05	-07	-07	-06	-09	-09	-11	-11	-11	-11	-12	-12	-10	-10	-10	-10	-10	-09	-09	-08
Institutional characteristics																								
% degree business	8	.3973	.17	17	12	14	14	13	13	15	15	16	19	18	18	19	20	21	22	22	22	21	22	22
Catholic	9	.4180	-.15	-13	-12	-12	-13	-13	-13	-12	-13	-13	-13	-12	-08	-11	-08	-11	-10	-10	-10	-11	-10	-10
% engineering	10	.4368	.06	06	10	10	09	10	10	09	13	13	13	16	18	16	14	15	14	14	13	13	14	14
% education	11	.4523	.18	14	12	11	10	11	12	12	11	09	13	13	17	17	15	15	15	14	14	14	13	13
Nonsectarian	12	.4725	.11	13	12	11	13	12	12	12	12	10	11	15	15	16	20	20	19	17	16	15	16	15
Far west region	13	.4848	.06	06	07	08	07	07	07	07	09	12	11	11	11	11	12	13	13	13	13	14	14	14
Tuition-out	14	.4940	.16	11	12	12	12	12	12	10	12	10	08	05	11	11	11	11	12	11	13	10	11	11
% health prof.	15	.5000	-.02	-00	02	00	-00	00	-00	-01	01	05	06	06	07	09	08	08	09	09	09	09	08	08
Post matriculation variables																								
College GPA	16	.5176	-.20	-22	-16	-17	-17	-16	-16	-16	-17	-16	-15	-15	-13	-14	-15	-15	-15	-14	-13	-13	-13	-14
Satisfied campus social life	17	.5300	.19	21	19	18	17	16	16	16	17	16	16	16	14	14	13	13	12	12	13	14	12	12
Transfer away	18	.5410	-.10	-08	-10	-11	-12	-12	-11	-11	-11	-11	-11	-12	-10	-10	-12	-12	-10	-11	-11	-12	-12	-13
Faculty-wellfare of institution	19	.5489	-.12	-11	-11	-11	-11	-10	-11	-10	-09	-09	-09	-09	-09	-11	-09	-09	-09	-09	-10	-10	-10	-10
Degree aspirations 1989	20	.5556	-.12	-11	-10	-10	-10	-09	-09	-09	-10	-09	-10	-09	-10	-09	-10	-09	-09	-08	-08	-09	-09	-10
Change major to business	21	.5625	-.10	-08	-06	-06	-06	-07	-06	-06	-06	-07	-07	-07	-06	-06	-06	-07	-08	-08	-09	-08	-09	-09

NOTE: Decimals omitted from beta coefficients.

Table 11
Predictors of students who transfer from private to public baccalaureate institutions. (N=359)

Name	Step	Mult R	Simp R	Beta at step 1	2	3	4	5	6	7	8	9	10	11
Sex	1	.1916	-.19	-19	-19	-20	-19	-17	-13	-08	-09	-10	-11	-11
Mother's Education	2	.2600	.18	18	18	16	17	17	10	10	10	10	11	11
First choice college	3	.3261	.20	21	20	20	20	19	13	12	14	14	13	14
Chose college financial reasons	4	.3452	.10	09	11	11	11	11	09	11	10	10	11	11
Attended college economic reasons	5	.3616	.15	12	12	11	11	11	13	10	10	11	10	10
Mid-Atlantic region	6	.4870	-.41	-39	-37	-34	-34	-34	-34	-33	-31	-31	-29	-28
College grade point average	7	.5165	-.26	-23	-22	-21	-23	-22	-18	-18	-19	-19	-20	-20
Career undecided	8	.5351	-.15	-16	-16	-18	-17	-17	-14	-14	-14	-14	-14	-17
Change major to health prof.	9	.5468	.10	12	12	11	12	12	11	12	11	11	12	12
Change major to education	10	.5579	.09	11	13	12	12	12	09	10	11	11	11	12
Major undecided	11	.5650	.07	08	07	06	07	06	04	04	09	09	09	09

NOTE:Decimals omitted from BETA coefficients.